

What is claimed is:

- 1 1. A communication apparatus, comprising:  
2 a channel estimator to estimate channel parameters for a communication  
3 channel based on a signal received from the communication channel; and  
4 a quality measure target generator to generate a quality measure target value for  
5 the communication apparatus using channel parameters estimated by said channel  
6 estimator, said quality measure target value representing a desired value for a quality  
7 measure associated with the communication apparatus.
- 1 2. The communication apparatus of claim 1, wherein:  
2 said quality measure target generator generates a signal to interference ratio  
3 (SIR) target value.
- 1 3. The communication apparatus of claim 1, wherein:  
2 said quality measure target generator includes a quality measure target estimator  
3 to determine an estimated quality measure target value using channel parameters  
4 estimated by said channel estimator and a quality measure target correction unit to  
5 correct said estimated quality measure target value based on performance information.
- 1 4. The communication apparatus of claim 3, wherein:  
2 said performance information includes block error rate (BLER) information.
- 1 5. The communication apparatus of claim 1, wherein:  
2 said quality measure target generator generates said quality measure target value  
3 using symbol energy variance information associated with the communication channel.
- 1 6. The communication apparatus of claim 1, comprising:  
2 a quality measure estimator to estimate an actual quality measure value for a  
3 signal received from the communication channel.

1 7. The communication apparatus of claim 6, comprising:  
2 a message generator to generate a power control message based on the  
3 estimated quality measure value and the quality measure target value.

1 8. The communication apparatus of claim 1, wherein:  
2 said communication apparatus is a handheld communicator.

1 9. The communication apparatus of claim 1, wherein:  
2 said communication apparatus is a base station transceiver.

1 10. The communication apparatus of claim 1, wherein:  
2 said communication apparatus is part of a code division multiple access  
3 (CDMA) system.

1 11. A method for generating a quality measure target value within a communication  
2 apparatus, comprising:  
3 estimating channel parameters for a communication channel based on a signal  
4 received from the communication channel; and  
5 calculating the quality measure target value using the estimated channel  
6 parameters.

1 12. The method of claim 11, wherein:  
2 calculating the quality measure target value includes determining an estimated  
3 quality measure target value using the estimated channel parameters.

1 13. The method of claim 12, wherein:  
2 calculating the quality measure target value further includes correcting the  
3 estimated quality measure target value based on performance information associated  
4 with the communication apparatus.

1 14. The method of claim 13, wherein:  
2 said performance information includes block error rate (BLER) information.

1 15. The method of claim 11, wherein:  
2 estimating channel parameters includes estimating at least one of the following:  
3 the number of paths in the communication channel, the strengths of paths in the  
4 communication channel, the relative velocity of the communication apparatus, the  
5 fading rates of paths in the communication channel, symbol energy variances in the  
6 communication channel, and variances between symbols of different blocks within the  
7 communication channel.

1 16. The method of claim 11, wherein:  
2 calculating the quality measure target value includes calculating a signal to  
3 interference ratio (SIR) target.

1 17. A communication apparatus, comprising:  
2 a channel estimator to estimate channel parameters for a communication  
3 channel based on a signal received from the communication channel;  
4 a performance estimator to estimate a performance parameter of the  
5 communication apparatus; and  
6 a quality measure target generator to generate a quality measure target value for  
7 the communication apparatus, wherein said quality measure target generator generates  
8 said quality measure target value using channel parameters estimated by said channel  
9 estimator and the estimated performance parameter determined by said performance  
10 estimator.

1 18. The communication apparatus of claim 17, wherein:  
2 said performance estimator estimates a receive error rate of the communication  
3 apparatus and said quality measure target generator uses said receive error rate to  
4 generate the quality measure target value.

1 19. The communication apparatus of claim 17, wherein:  
2 said quality measure target generator uses the channel parameters to determine  
3 an approximate quality measure target value and the estimated performance parameter  
4 to correct the approximate quality measure target value.

1 20. The communication apparatus of claim 17, wherein:  
2 said channel estimator estimates at least one of the following: the number of  
3 paths in the communication channel, the strengths of paths in the communication  
4 channel, the relative velocity of the communication apparatus, the fading rates of paths  
5 in the communication channel, symbol energy variances in the communication channel,  
6 and variances between symbols of different blocks within the communication channel.

1 21. The communication apparatus of claim 17, comprising:  
2 a quality measure estimator to estimate a quality measure of the signal received  
3 from the communication channel; and  
4 a message generator to generate a power control message based on the  
5 estimated quality measure and the quality measure target value.

1 22. A mobile communicator, comprising:  
2 a first quality measure target generator to generate a first quality measure target  
3 value for a first remote base station using estimated channel parameters for a  
4 communication channel between said mobile communicator and said first remote base  
5 station;  
6 a second quality measure target generator to generate a second quality measure  
7 target value for a second remote base station using estimated channel parameters for a  
8 communication channel between said mobile communicator and said second remote  
9 base station; and

10 a site selection manager to select a remote base station to act as a servicing base  
11 station for the mobile communicator using at least said first quality measure target  
12 value and said second quality measure target value.

1 23. The mobile communicator of claim 22, wherein:  
2 said first and second quality measure target generators include SIR target  
3 generators.

1 24. The mobile communicator of claim 22, comprising:  
2 at least one other quality measure target generator to generate at least one other  
3 quality measure target value for at least one other remote base station, wherein said site  
4 selection manager uses said at least one other quality measure target value to select said  
5 remote base station to act as said servicing base station.

1 25. The mobile communicator of claim 22, further comprising:  
2 a message generator to generate a power control message for a remote base  
3 station based on a corresponding quality measure target value.